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CLAIMS

[A utility model registration claim]

[Claim 1] A main part consists of combination of a top and a bottom lid, a changeover circuit is established in the interior of a main part, a changeover circuit prepares a plug slot, a changeover circuit can be connected with a USB plug socket, a plug slot is established in the lengthwise direction 1 side of a main part, fitting and an axial case are extended in an axial case where a USB plug socket is circular at the main part front end, direct plug connection makes at elutriation and a computer, inconvenient [of connection with lead wire] removes, and it is a plug slot. A card reader characterized by being exchangeable for different flash plate memory card.

[Claim 2] A main part top and a bottom lid are a card reader according to claim 1 characterized by being able to form an opening in the condition of having made U characters the vertical sense side and the front end reverse, and for a plug slot being able to prepare, and installing on both sides of a USB plug socket.

[Claim 3] It is the card reader according to claim 1 characterized by being in the condition that a semicircle-like opening is formed in the main part vertical lid front end, respectively, an axial case with comparatively big ends which projected circularly is inserted in fitting and an axial case by opening, and it can rotate.

[Claim 4] A card reader according to claim 1 with the feature constituted so that a projecting auxiliary stop and a projecting projection may be prepared in the opening 1 side of a lower lid, and an axial case and it may maintain at a home position at the time of a revolution.

[Claim 5] Memory card of a plug slot is a card reader according to claim 1 characterized by inserting and connecting at a USB plug socket and an angle of 90 degrees.

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DETAILED DESCRIPTION

[Detailed explanation of a design]

[0001]

[The technical field to which a design belongs]

A main part consists of the combination of a top and a bottom lid, forms an opening in the side and the front end, inserts it in a side opening, and has a slot. a changeover circuit is prepared, and the USB plug socket linked to a circuit is related with a card reader with the feature connectable with a computer at a free angle, without establishing an axial case, and an axial case and a USB plug socket ****(ing) to the main part front end, and tying with lead wire.

[0002]

[Description of the Prior Art]

As shown in drawing 1, the common card reader consisted of the main part 11, and the main part 11 formed the plug slot 12, and has connected the main part 11 with the USB plug socket 14 with lead wire 13. After the flash plate memory card 15 is inserted in the plug slot 12, the USB plug socket 14 is inserted and connected to a computer. Lead wire 13 connects and this kind of structure is very inconvenient on an activity.

[0003]

Indirect type flash memory object dependence equipment is shown in drawing 2. The memory object was prepared in the direct case 21 interior, and has formed the USB plug socket 22 in the end of a case 21.

[0004]

[Problem(s) to be Solved by the Device]

Although indirect type flash memory object dependence equipment reduced the volume of a device and it has canceled inconvenient [of connection], since the flash plate memory card by which internal organs were carried out was unexchangeable, it could not enlarge capacity, but was activity top disadvantage, increased the manufacturing cost, and was not ideal.

[0005]

[Means for Solving the Problem]

A main part consisted of combination of a top and a bottom lid, a changeover circuit was established in the interior of a main part, a changeover circuit is established in a plug slot, and it connected with a USB plug socket and it has prepared an axial case in a USB plug socket. A plug slot is established in the lengthwise direction 1 side of a main part, and since an axial case in which a USB plug socket and a revolution are free is extended to the main part front end and makes direct plug connection at elutriation and a computer, it can remove inconvenient [of connection with lead wire], can install it at a free angle, and can be exchanged for flash plate memory card which changes with plug slots.

[0006]

A main part top and a bottom lid can form an opening in the condition of having made U characters the vertical sense side and the front end reverse, and a plug slot can form it, and it can be installed on both sides of a USB plug socket.

[0007]

[A gestalt of design implementation]

As shown in drawing 3, the rectangle main part 3 consists of combination of a top and the bottom lids 31 and 32. A main part 3 becomes thin as it goes ahead, and the main part 3 interior is equipped with the changeover circuit 33. Install the changeover circuit 33 in the plug slot 34, and it is connected with the USB plug socket 36 with changeover circuit 33 lead wire 35. The USB plug socket 36 forms the auxiliary stop 38 in inside of fitting and the axial case 37 at the axial circular case 37 in which ends projected in the shape of comparatively big] a loop, and inserts the changeover circuit 33 in the main part 3 interior, or relation

immobilization is carried out.

[0008]

A top and the bottom lids 31 and 32 are thin as they go ahead toward a lengthwise direction. The openings 311 and 321 which made U characters reverse, respectively, and 312 and 322 are prepared. After it fixes the changeover circuit 33 strongly and a top and the bottom lids 31 and 32 are mutually put together, The plug slot 34 is installed according to the pushing-both-of-its-arms-under-the-opponent's lump openings 311 and 321. It constitutes in the shape of projection dew, different flash plate memory card is inserted, and it can connect. The USB plug socket 36 is pinched by the pushing-both-of-its-arms-under-the-opponent's lump openings 312 and 322 in the axial case 37, and is installed. It doubles with a projection and a main part, it is extended outward, it rotates, and when rotating, an operation maintained at a home position by the projection 323 prepared the auxiliary stop 38 and the opening 322 side side is constituted, and it is inserted in a USB plug plinth of a computer, and connects. Direct continuation of the card reader 300 is carried out to a basis of a lead-wire unnecessary condition, and a USB plug plinth of a computer, and it can be exchanged for further different flash plate memory card.

[0009]

As shown in drawing 4 , the card reader 300 of small area was constituted after combination, the front was equipped with the USB plug socket 36, and the direct plug connection activity could be carried out at a USB plug plinth of a computer, and lead wire was not needed for connection, but it has improved inconvenient [which connects lead wire]. It inserted in a lengthwise direction, a slot 34 was formed, different flash plate memory card 4 could be exchanged at any time, and a main part 3 could carry out the optional revolution, it was adapted for different space and raised practical use worth of a card reader 300 to a different angle.

[0010]

As shown in drawing 5 , when it can rotate freely and a main part 1 connects, the axial case 37 of this design is constituted at an angle which changes memory card and the USB plug socket 36, is rotated, and is different, and can be applied to different plug installation space.

[0011]

[Effect of the Device]

The direct difference of the USB plug socket which prepared the plug slot which can insert flash plate memory card, and prepared the axial case in the interior of a main part could be carried out to the computer at the free angle, and it removed inconvenient [of connection with lead wire]. Furthermore, it can also exchange for different flash plate memory card, and has become practical layout.

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TECHNICAL FIELD

[The technical field to which a design belongs]

A main part consists of the combination of a top and a bottom lid, forms an opening in the side and the front end, inserts it in a side opening, and has a slot, a changeover circuit is prepared, and the USB plug socket linked to a circuit is related with a card reader with the feature connectable with a computer at a free angle, without establishing an axial case, and an axial case and a USB plug socket ****(ing) to the main part front end, and tying with lead wire.

[0002]

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PRIOR ART

[Description of the Prior Art]

As shown in drawing 1, the common card reader consisted of the main part 11, and the main part 11 formed the plug slot 12, and has connected the main part 11 with the USB plug socket 14 with lead wire 13. After the flash plate memory card 15 is inserted in the plug slot 12, the USB plug socket 14 is inserted and connected to a computer. Lead wire 13 connects and this kind of structure is very inconvenient on an activity.

[0003]

Indirect type flash memory object dependence equipment is shown in drawing 2. The memory object was prepared in the direct case 21 interior, and has formed the USB plug socket 22 in the end of a case 21.

[0004]

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EFFECT OF THE INVENTION

[Effect of the Device]

The direct difference of the USB plug socket which prepared the plug slot which can insert flash plate memory card, and prepared the axial case in the interior of a main part could be carried out to the computer at the free angle, and it removed inconvenient [of connection with lead wire]. Furthermore, it can also exchange for different flash plate memory card, and has become practical layout.

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TECHNICAL PROBLEM

Problem(s) to be Solved by the Device]

Although indirect type flash memory object dependence equipment reduced the volume of a device and it has canceled inconvenient [of connection], since the flash plate memory card by which internal organs were carried out was unexchangeable, it could not enlarge capacity, but was activity top disadvantage, increased the manufacturing cost, and was not ideal.

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MEANS

Means for Solving the Problem]

A main part consisted of combination of a top and a bottom lid, a conversion circuit was established in the interior of a main part, a conversion circuit is established in a plug slot, and it connected with a USB plug socket and it has prepared an axial case in a USB plug socket. A plug slot is established in the lengthwise direction 1 side of a main part, and since an axial case in which a USB plug socket and rotation are free is extended to the main part front end and makes direct plug connection at elutriation and a computer, it can remove inconvenient [of connection with lead wire], can install it at a free angle, and can be exchanged for flash plate memory card which changes with plug slots.

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A main part top and a bottom lid can form an opening in the condition of having made U characters the vertical sense side and the front end reverse, and a plug slot can form it, and it can be installed on both sides of a USB plug socket.

0007]

A gestalt of design implementation]

As shown in drawing 3, the rectangle main part 3 consists of combination of a top and the bottom lids 31 and 32. A main part 3 becomes thin as it goes ahead, and the main part 3 interior is equipped with the conversion circuit 33. Install the conversion circuit 33 in the plug slot 34, and it is connected with the USB plug socket 36 with conversion circuit 33 lead wire 35. The USB plug socket 36 forms the auxiliary stop 38 in inside of fitting and the axial case 37 at the axial circular case 37 projected in the shape of [with comparatively big both ends] a loop, and inserts the conversion circuit 33 in the main part 3 interior, or relation immobilization is carried out.

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A top and the bottom lids 31 and 32 are thin as they go ahead toward a lengthwise direction. The openings 311 and 321 which made U characters reverse, respectively, and 312 and 322 are prepared. After it fixes the conversion circuit 33 strongly and a top and the bottom lids 31 and 32 are mutually put together. The plug slot 34 is installed according to the pushing-both-of-its-arms-under-the-opponent's lump openings 311 and 321. It constitutes in the shape of projection dew, different flash plate memory card is inserted, and it can connect. The USB plug socket 36 is pinched by the pushing-both-of-its-arms-under-the-opponent's lump openings 312 and 322 in the axial case 37, and is installed. It doubles with a projection and a main part, it is extended outward, it rotates, and when rotating, an operation maintained at a home position by the projection 323 prepared the auxiliary stop 38 and the opening 322 side side is constituted, and it is inserted in a USB plug plinth of a computer, and connects. Direct continuation of the card reader 300 is carried out to a basis of lead-wire unnecessary condition, and a USB plug plinth of a computer, and it can be exchanged for further different flash plate memory card.

0009]

As is shown in drawing 4 -- as -- after combination and a facet -- constituting the card reader 300 of a product, the front was equipped with the USB plug socket 36, and direct plug connection use could be carried out at a USB plug plinth of a computer, and lead wire was not needed for connection, but it has improved inconvenient [which connects lead wire]. It inserted in a lengthwise direction, a slot 34 was formed, different flash plate memory card 4 could be exchanged at any time, and a main part 3 could carry out optional rotation, it was adapted for different space and raised practical use worth of a card reader 300 to a different angle. [0010]

As shown in drawing 5, when it can rotate freely and a main part 1 connects, the axial case 37 of this design is constituted at an angle which changes memory card and the USB plug socket 36, is rotated, and is

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the solid perspective diagram of a card reader conventionally.

[Drawing 2] It is the indirect type storage object objection equipment spacial configuration perspective diagram of a card reader conventionally.

[Drawing 3] It is the solid decomposition perspective diagram of the card reader by this 1 example.

[Drawing 4] It is the perspective diagram of the card reader by this 1 example.

[Drawing 5] It is axial case actuation drawing by this 1 example.

[Description of Notations]

- 11 Main Part
- 12 Plug Slot
- 13 Lead Wire
- 14 USB Plug Socket
- 15 Flash Plate Memory Card
- 21 Case
- 22 USB Plug Socket
- 3 Main Part
- 300 Card Reader
- 31 Top Cover
- 311 Opening
- 312 Opening
- 32 Lower Lid
- 321 Opening
- 322 Opening
- 323 Projection
- 33 Conversion Circuit
- 34 Plug Slot
- 35 Lead Wire
- 36 USB Plug Socket
- 37 Shaft Guard
- 38 Auxiliary Stop
- 3 Flash Plate Memory Card

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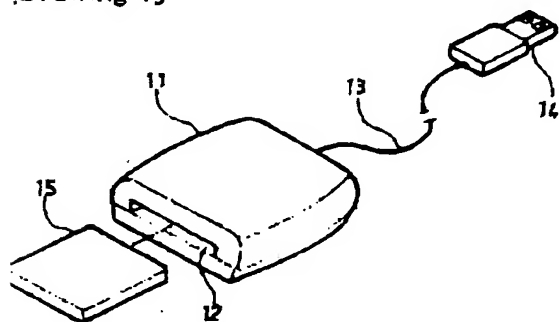
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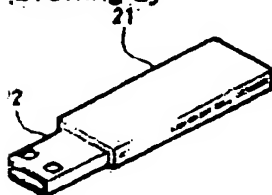
3. In the drawings, any words are not translated.

DRAWINGS

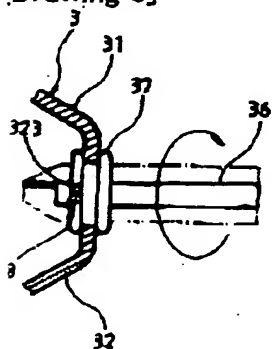
[Drawing 1]



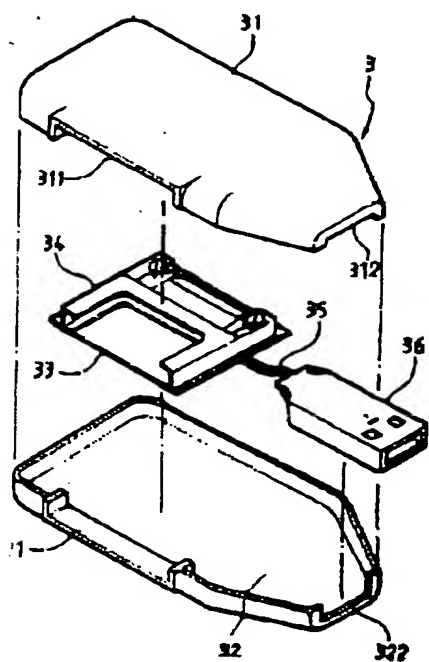
[Drawing 2]



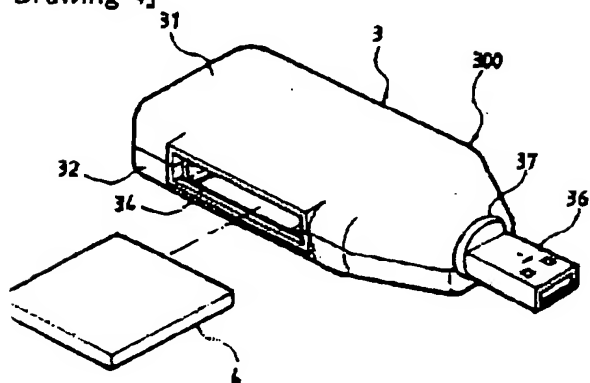
[Drawing 5]



[Drawing 3]



Drawing 4]



Translation done.]

(19) 日本国特許庁 (J P)

(12) 登録実用新案公報 (U)

(11) 実用新案登録番号

実用新案登録第3080713号
(U3080713)

(45) 発行日 平成13年10月5日 (2001. 10. 5)

(24) 登録日 平成13年7月18日 (2001. 7. 18)

(51) Int.Cl.

識別記号

F I

G 0 6 K 17/00

G 0 6 K 17/00

Z

G 0 6 F 1/16

G 0 6 F 1/00

3 1 2 W

評価書の請求 未請求 請求項の数 5 O L (全 6 頁)

(21) 出願番号 実願2001-1727 (U2001-1727)

(22) 出願日 平成13年3月29日 (2001. 3. 29)

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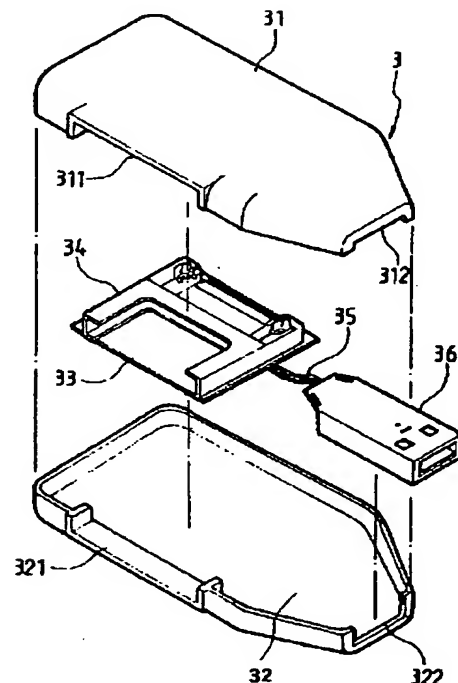
弁理士 志村 正和

(54) 【考案の名称】 カードリーダーの構造

(57) 【要約】

【課題】 本体は上・下蓋の組み合わせから成り、側面、前端に差し込み口を設け、側面差し込み口には差し込み溝があり転換電子回路を設け、本体前端にはUSBコンセントが突出し、導線でつながることなくコンピューターに接続できる特徴のあるカードリーダーを提供する。

【解決手段】 本体は上・下蓋の組み合わせから構成され、本体は縦方向一側面に転換電子回路を設けた差し込み溝を設け、軸ケースを設けたUSBコンセントと接続し、回転自由な軸ケースとUSBコンセントは本体前端に伸びて突出し、自由な角度でコンピューターに直接差し込み接続できるため、導線による接続の不便さを取り除き、様々な空間に適応し、差し込み溝により異なる記憶カードを交換することができる。



1

【実用新案登録請求の範囲】

【請求項1】 本体は上・下蓋の組み合わせから構成され、本体内部には転換回路を設け、転換回路は差し込み溝を設け、転換回路はUSBコンセントと接続することができ、差し込み溝は本体の縦方向一側面に設けられUSBコンセントは円形の軸ケースにはめ込み、軸ケースは本体前端に伸びて飛び出し、コンピューターに直接差し込み接続でき、導線による接続の不便さを取り除き、差し込み溝により異なるフラッシュメモリーカードに交換できることを特徴とするカードリーダー。

【請求項2】 本体上・下蓋は縦向き側面及び前端にU字を逆さにした状態の差し込み口を設け、差し込み溝が設けることができ、USBコンセントを挟み設置することを特徴とする請求項1記載のカードリーダー。

【請求項3】 本体上下蓋前端にはそれぞれ半円状の差し込み口を設け、両端が比較的大きな円形に突出した軸ケースをはめ込み、軸ケースは差し込み口にはめ込まれ、回転できる状態になることを特徴とする請求項1記載のカードリーダー。

【請求項4】 下蓋の差し込み口一側面及び軸ケース内には突出した補助止め及び突起が設けられ、回転時に定位置に保つように構成する特徴のある請求項1記載のカードリーダー。

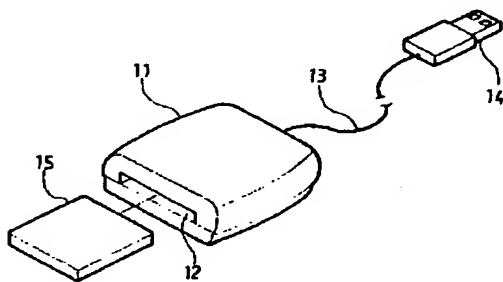
【請求項5】 差し込み溝のメモリーカードはUSBコンセントと90度の角度で差し込み接続することを特徴とする請求項1記載のカードリーダー。

【図面の簡単な説明】

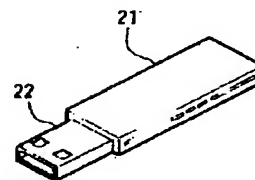
【図1】 従来カードリーダーの立体斜視図である。

【図2】 従来カードリーダーの間接式記憶体異存装置立体構造斜視図である。

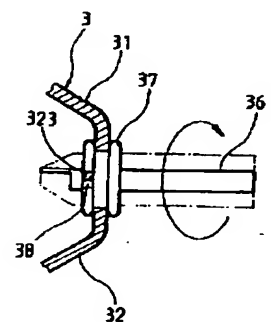
【図1】



【図2】



【図5】



【図3】 本考案一実施例によるカードリーダーの立体分解斜視図である。

【図4】 本考案一実施例によるカードリーダーの斜視図である。

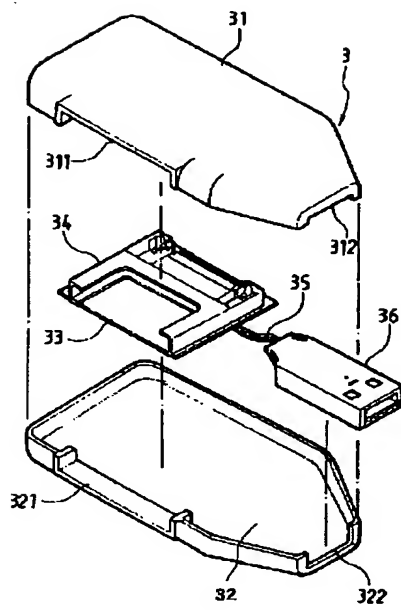
【図5】 本考案一実施例による軸ケース動作図である。

【符号の説明】

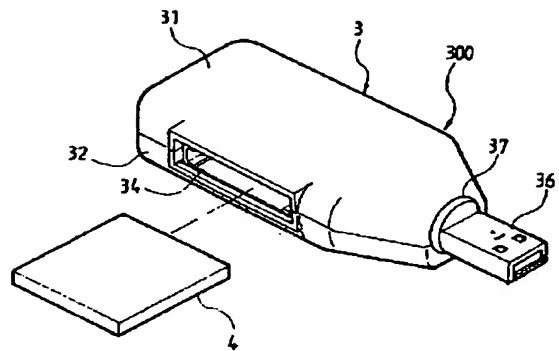
1 1	本体
1 2	差し込み溝
1 3	導線
10 1 4	USBコンセント
1 5	フラッシュメモリーカード
2 1	ケース
2 2	USBコンセント
3	本体
3 0 0	カードリーダー
3 1	上蓋
3 1 1	差し込み口
3 1 2	差し込み溝
3 2	下蓋
20 3 2 1	差し込み口
3 2 2	差し込み溝
3 2 3	突起
3 3	転換回路
3 4	差し込み溝
3 5	導線
3 6	USBコンセント
3 7	軸カバー
3 8	補助止め
4	フラッシュメモリーカード

30

【図3】



【図4】



【考案の詳細な説明】**【0001】****【考案の属する技術分野】**

本体は上・下蓋の組み合わせから成り、側面、前端に差し込み口を設け、側面差し込み口には差し込み溝があり転換回路を設け、回路と接続したUSBコンセントは軸ケースを設け本体前端に軸ケースとUSBコンセントが突伸し、導線でつなぐことなく、自由な角度でコンピューターに接続できる特徴のあるカードリーダーに関する。

【0002】**【従来技術】**

図1に示すように、一般のカードリーダーは、本体11から成り、本体11は差し込み溝12を設け、導線13により本体11はUSBコンセント14と接続している。フラッシュメモリーカード15は差し込み溝12に差し込まれた後、USBコンセント14はコンピューターに差し込み接続される。この種の構造は導線13により接続され、使用上とても不便である。

【0003】

図2に間接式フラッシュメモリー体依存装置を示す。メモリー体は直接ケース21内部に設け、ケース21の一端にはUSBコンセント22を設けている。

【0004】**【考案が解決しようとする課題】**

間接式フラッシュメモリー体依存装置は機器の体積を縮小し、接続の不便さを解消できたが、内臓されたフラッシュメモリーカードは交換することができないため、容量を大きくすることができず、使用上不便で、製造コストを増加し、理想的ではなかった。

【0005】**【課題を解決するための手段】**

本体は上・下蓋の組み合わせから構成され、本体内部には転換回路を設け、転換回路は差し込み溝に設け、USBコンセントと接続しUSBコンセントには軸ケースを設けている。差し込み溝は本体の縦方向一側面に設けられ、USBコンセントと

回転自在の軸ケースは本体前端に伸びて飛び出し、コンピューターに直接差し込み接続できるため、導線による接続の不便さを取り除き、自由な角度で設置でき、差し込み溝により異なるフラッシュメモリーカードに交換できる。

【0006】

本体上・下蓋は縦向き側面及び前端にU字を逆さにした状態の差し込み口を設け、差し込み溝が設けることができ、USBコンセントを挟み設置することができる。

【0007】

【考案実施の形態】

図3に示すように、長方形本体3は上・下蓋31、32の組み合わせから成り、本体3は前方にいくに従って細くなり、本体3内部には転換回路33を備え、転換回路33は差し込み溝34に設置し、転換回路33導線35によりUSBコンセント36と接続し、USBコンセント36は両端が比較的大きな環状線状に突出した円形の軸ケース37にはめ込み、軸ケース37の内には補助止め38を設け、転換回路33は本体3内部にはめ込み或いは繋がり固定されている。

【0008】

上・下蓋31、32は縦方向に向かい前方にいくに従って細くなっており、それぞれU字を逆さにした様な差し込み口311、321及び312、322、を設け、転換回路33をきつく固定し、上・下蓋31、32が相互に合わさった後、差し込み溝34は両差し込み口311、321に合わせて設置され、突出し露状に構成し、異なるフラッシュメモリーカードを差し込み接続でき、USBコンセント36は軸ケース37により両差し込み口312、322に挟まれ設置され、外向きに伸びて突出し、本体に合わせ回転し、回転する時、補助止め38と差し込み口322側辺に設けた突起323により定位置に保つ作用を構成し、コンピューターのUSB差し込み台座に差し込まれ接続する。カードリーダー300は導線不要状態のもと、コンピューターのUSB差し込み台座に直接接続され、更に異なるフラッシュメモリーカードに交換することができる。

【0009】

図4に示すように、組み合わせ後、小面積のカードリーダー300を構成し、

前方はUSBコンセント36を備えコンピューターのUSB差し込み台座に直接差し込み接続使用でき、接続に導線を必要とせず、導線をつなぐ不便さを改善した。縦方向には差し込み溝34を設け、異なるフラッシュメモリーカード4を随時交換でき、本体3は異なる角度に随意回転でき、異なる空間に適応し、カードリーダー300の実用価値を高めた。

【0010】

図5に示すように、本考案の軸ケース37は自由に回転でき、本体1が接続する時、メモリーカードとUSBコンセント36を翻し回転させて異なる角度に構成し、異なる差し込み設置空間に適用できる。

【0011】

【考案の効果】

本体内部にフラッシュメモリーカードを差し込める差し込み溝を設け、軸ケースを設けたUSBコンセントは自由な角度でコンピューターに直接差し込むことができ、導線による接続の不便さを取り除いた。さらに、異なるフラッシュメモリーカードに交換することもでき、実用的な設計となっている。